

**GOVERNMENT OF INDIA  
RAILWAYS  
LOK SABHA**

UNSTARRED QUESTION NO:1286  
ANSWERED ON:12.12.2013  
ANTI COLLISION MECHANISM  
J Helen Davidson

**Will the Minister of RAILWAYS be pleased to state:**

- (a) whether the Railways has any proposal in hand to fix the anti-collision machines in different trains, particularly in the fast moving trains in the country to avoid accidents;
- (b) if so, the details thereof with number of such trains and their destinations; and
- (c) if not, the reasons therefor?

**Answer**

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI ADHIR RANJAN CHOWDHURY)

(a) to (c) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 1286 BY SHRIMATI J. HELEN DAVIDSON TO BE ANSWERED IN LOK SABHA ON 12.12.2013 REGARDING ANTI-COLLISION MECHANISM.

(a) Yes, Madam.

(b)

(i) Anti Collision Device (ACD) has been provided as a pilot project on 1736 route kilometers & 548 Locomotives on Katihar – Kumedpur - New Jalpaiguri – Guwahati – Lumding – Tinsukia – Dibrugarh – Ledo and Kumedpur – Malda sections of Northeast Frontier Railway (NFR) and it has been in service trials since 2006.

(ii) On Board Train Protection & Warning System (TPWS), which eliminates collisions / accidents caused by human error leading to Signal Passing At Danger and/or over speeding. The pilot project on suburban section of Southern Railway, i.e. between Chennai Central & Gummidipundi (50 Route Kms) has been commissioned and is operational on 82 motor coaches of Electrical Multiple Units (EMUs) and another pilot project of TPWS on non-suburban section on Delhi-Agra section (200 Route Kms) of North Central Railway has also been commissioned and service trials are in progress with 35 locomotives. Operational trials of TPWS have also commenced on 25 RKms of Kolkata Metro.

(iii) Train Collision Avoidance System (TCAS) is being developed indigenously by Research Designs & Standards Organisation (RDSO). It incorporates collision prevention as well as protection against Signal Passing At Danger (SPAD) by loco pilot. The specification of TCAS has been firmed up by RDSO and proof of concept trials were carried out during October/November, 2012. Extended trials on 250 Kms section on South Central Railway have been planned for which tenders have also been finalized by RDSO. Based on success of extended trials, further deployment on Indian Railways is likely to be considered.

(c) Does not arise.